

Assessment of Local HO_x and RO_x Measurement Techniques: Achievements, Challenges, and Future Directions - Outcomes from the International HO_x Workshop 2015

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Measurements of HO_x radicals are an important tool for the investigation of tropospheric chemistry in field campaigns and simulation chamber experiments. The measured data allow us to test chemical models simulating the atmospheric concentrations of OH, HO₂ and RO₂, and help to improve chemical mechanisms used in regional and global models for predictions of the atmospheric chemical composition. In Spring 2015, an international, IGAC-endorsed workshop took place at Forschungszentrum Jülich, Germany, to assess the performance and reliability of current HO_x measurement techniques. Fifteen international groups from Germany, UK, Ireland, France, Finland, USA, China and Japan came together to discuss achievements, challenges and future directions of laser-based, mass-spectrometry based, and chemical techniques. Following the discussions, a working group was established to guide the community in the near future in making progress on continued improvement in HO_x measurements. Three goals will be pursued: the development of a common calibration unit, the development of procedures to investigate and, if necessary, eliminate possible measurement artefacts, and planning for future instrumental inter-comparisons. This poster contribution will give an overview of the workshop, its outcome and planned activities.